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Tara Pouyan

<120> P-SELECTIN LIGANDS AND RELATED MOLECULES
AND METHODS

<130> 00786/284002

<140> 08/756,018
<141> 1996-11-25

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<151> 1995-06-14

<150> 08/661,960
<151> 1996-06-12

<160> 17

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 10
<212> PRT
<213> Homo sapiens

<400> 1
Ala Thr Glu Ala Gln Thr Thr Pro Pro Ala
1 5 10

<210> 2
<211> 18
<212> PRT
<213> Homo sapiens

<400> 2
Met Ala Thr Asn Ser Leu Glu Thr Ser Thr Gly Thr Ser Gly Pro Pro
1 5 10 15
Val Thr

<210> 3
<211> 42
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<213> Homo sapiens

<400> 3
Gln Leu Trp Asp Thr Trp Ala Asp Glu Ala Glu Lys Ala Leu Gly Pro
1 5 10 15
Leu Leu Ala Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr Leu Asp
20 25 30
Tyr Asp Phe Leu Pro Glu Thr Glu Pro Pro
35 40

C
JF
<210> 4
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4
Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe
1 5 10 15
Leu Pro Glu Thr
20

<210> 5
<211> 20
<212> PRT
<213> Homo sapiens

<400> 5
Arg Asp Arg Arg Gln Ala Thr Glu Phe Glu Phe Leu Asp Phe Asp Phe
1 5 10 15
Leu Pro Glu Thr
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<210> 6
<211> 20
<212> PRT
<213> Homo sapiens

<400> 6
Arg Asp Arg Arg Gln Ala Ala Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe
1 5 10 15
Leu Pro Glu Ala
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<210> 7
<211> 20
<212> PRT
<213> Homo sapiens

<400> 7
Arg Asp Arg Arg Gln Ala Ala Glu Phe Glu Phe Leu Asp Phe Asp Phe
1 5 10 15
Leu Pro Glu Ala
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<210> 8
<211> 2287
<212> DNA
<213> Homo sapiens

<400> 8
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tcggtaagg ttcctgcaa ggcttctgaa ggcacattca gcagctatgc tatcagctgg 180

gtgcgacagg cccctggaca agggctttag tggatggag ggatcatccc tatctttgg 240
 acagcaact acgcacagaa gttccaggc agagtcacga ttaccgcgga cgaatccacg 300
 agcacagcct acatggagct gagcagcctg agatctgagg acacggccgt gtattactgt 360
 gcgagagata atggagcgta ttgttagtgg ggtagctgct actcgggctg gttcgacccc 420
 tggggccagg gaaccctggt caccgtctc tcaggtgagt actgaattct agctttctgg 480
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<210> 9

<211> 442

<212> PRT

<213> Homo sapiens

<400> 9

Lys	Leu	Thr	Thr	Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Phe	Val	Val
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Ala	Ala	Ala	Thr	Gly	Val	Gln	Ser	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly
					20			25					30		
Ala	Glu	Val	Lys	Lys	Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala
	35				40				45						
Ser	Gly	Gly	Thr	Phe	Ser	Ser	Tyr	Ala	Ile	Ser	Trp	Val	Arg	Gln	Ala
				50			55		60						
Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Gly	Ile	Ile	Pro	Ile	Phe	Gly
65					70			75				80			
Thr	Ala	Asn	Tyr	Ala	Gln	Lys	Phe	Gln	Gly	Arg	Val	Thr	Ile	Thr	Ala
					85			90				95			
Asp	Glu	Ser	Thr	Ala	Arg	Asp	Asn	Gly	Ala	Tyr	Cys	Ser	Gly	Gly	Ser
					100			105				110			
Cys	Tyr	Ser	Gly	Trp	Phe	Asp	Pro	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr

115 120 125
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 130 135 140
 Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
 145 150 155 160
 Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 165 170 175
 Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 180 185 190
 Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Asp Lys
 195 200 205
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 210 215 220
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 225 230 235 240
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 245 250 255
 Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 260 265 270
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 275 280 285
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 290 295 300
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 305 310 315 320
 Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 325 330 335
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
 340 345 350
 Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 355 360 365
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 370 375 380
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 385 390 395 400
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 405 410 415
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 420 425 430
 Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440

<210> 10
 <211> 1894
 <212> DNA
 <213> Homo sapiens

<400> 10
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 gccaaggatgtt tttatatcgc atccggccttt cgaaacgagg agtacaataa gtcggttcag
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gataagtgtg agccactgga gaagcagcac gagaaggaga ggaaacagga ggagggggaa 600
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 cgttcttca tgctccgtga tgcattgaggc tctgcacaac cactacacgc agaagagcct 1860
 ctccctgtct ccgggtaaat gagtgcgacg gccc 1894

<210> 11
 <211> 437
 <212> PRT
 <213> Homo sapiens

<400> 11
 Met Ala Leu Ser Trp Val Leu Thr Val Leu Ser Leu Leu Pro Leu Leu
 1 5 10 15
 Glu Ala Gln Ile Pro Leu Cys Ala Asn Leu Val Pro Val Pro Ile Thr
 20 25 30
 Asn Ala Thr Leu Asp Gln Ile Thr Gly Lys Trp Phe Tyr Ile Ala Ser
 35 40 45
 Ala Phe Arg Asn Glu Glu Tyr Asn Lys Ser Val Gln Glu Ile Gln Ala
 50 55 60
 Thr Phe Phe Tyr Phe Thr Pro Asn Lys Thr Glu Asp Thr Ile Phe Leu
 65 70 75 80
 Arg Glu Tyr Gln Thr Arg Gln Asp Gln Cys Ile Tyr Asn Thr Thr Tyr
 85 90 95
 Leu Asn Val Gln Arg Glu Asn Gly Thr Ile Ser Arg Tyr Val Gly Gly
 100 105 110
 Gln Glu His Phe Ala His Leu Leu Ile Leu Arg Asp Thr Lys Thr Tyr
 115 120 125
 Met Leu Ala Phe Asp Val Asn Asp Glu Lys Asn Trp Gly Leu Ser Val
 130 135 140
 Tyr Ala Asp Lys Pro Glu Thr Thr Lys Glu Gln Leu Gly Glu Phe Tyr
 145 150 155 160
 Glu Ala Leu Asp Cys Leu Arg Ile Pro Lys Ser Asp Val Val Tyr Thr
 165 170 175
 Asp Trp Lys Lys Asp Lys Cys Glu Pro Leu Glu Lys Gln His Glu Lys
 180 185 190
 Glu Arg Lys Gln Glu Glu Gly Glu Ser Asp Pro Glu Gly Glu Pro Lys
 195 200 205
 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
 210 215 220

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 225 230 235 240
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 245 250 255
 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
 260 265 270
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 275 280 285
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 290 295 300
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
 305 310 315 320
 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 325 330 335
 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
 340 345 350
 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 355 360 365
 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 370 375 380
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 385 390 395 400
 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
 405 410 415
 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 420 425 430
 Leu Ser Pro Gly Lys
 435

<210> 12
 <211> 442
 <212> PRT
 <213> Homo sapiens

<400> 12
 Lys Leu Thr Thr Met Asp Trp Thr Trp Arg Phe Leu Phe Phe Val Val
 1 5 10 15
 Ala Ala Ala Thr Gly Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly
 20 25 30
 Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala
 35 40 45
 Ser Gly Gly Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala
 50 55 60
 Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly
 65 70 75 80
 Thr Ala Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala
 85 90 95
 Asp Glu Ser Thr Ala Arg Asp Asn Gly Ala Tyr Cys Ser Gly Gly Ser
 100 105 110
 Cys Tyr Ser Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr
 115 120 125
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 130 135 140
 Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
 145 150 155 160
 Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 165 170 175

(Handwritten marks: F, X, J, U)

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
180 185 190
Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Asp Lys
195 200 205
Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
210 215 220
Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
225 230 235 240
Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
245 250 255
Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Asn Phe Ser Trp
260 265 270
Tyr Val Asp Gly Val Glu Val His Asn Asn Lys Thr Lys Pro Arg Glu
275 280 285
Glu Asn Tyr Ser Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
290 295 300
His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Asn Val Ser Asn
305 310 315 320
Lys Ala Leu Pro Ala Pro Ile Glu Lys Asn Ile Ser Lys Ala Lys Gly
325 330 335
Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
340 345 350
Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
355 360 365
Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
370 375 380
Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
385 390 395 400
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
405 410 415
Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
420 425 430
Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440

<210> 13
<211> 42
<212> PRT
<213> Homo sapiens

<400> 13
Pro Glu Met Leu Arg Asn Ser Thr Asp Thr Thr Pro Leu Thr Gly Pro
1 5 10 15
Gly Thr Pro Glu Ser Thr Thr Val Glu Pro Ala Ala Arg Arg Ser Thr
20 25 30
Gly Leu Asp Ala Gly Gly Ala Val Thr Glu
35 40

<210> 14
<211> 16
<212> PRT
<213> Homo sapiens

<400> 14
Leu Thr Thr Glu Leu Ala Asn Met Gly Asn Leu Ser Thr Asp Ser Ala
1 5 10 15

f
Worked

<210> 15

<211> 13

<212> PRT

<213> Homo sapiens

<400> 15

Thr Gly Asp Tyr Tyr Glu Asp Ser Tyr Glu Asp Ile Ser
1 5 10

<210> 16

<211> 9

<212> PRT

<213> Homo sapiens

<400> 16

Glu Asp Tyr Glu Tyr Asp Glu Leu Pro
1 5

<210> 17

<211> 91

<212> PRT

<213> Homo sapiens

<400> 17

Ile Thr Thr Asn Ser Pro Glu Thr Ser Ser Arg Thr Ser Gly Ala Pro
1 5 10 15

Val Thr Thr Ala Ala Ser Ser Leu Glu Thr Ser Arg Gly Thr Ser Gly
20 25 30

Pro Pro Leu Thr Met Ala Thr Val Ser Leu Glu Thr Ser Lys Gly Thr
35 40 45

Ser Gly Pro Pro Val Thr Met Ala Thr Asp Ser Leu Glu Thr Ser Thr
50 55 60

Gly Thr Thr Gly Pro Pro Val Thr Met Thr Thr Gly Ser Leu Glu Pro
65 70 75 80

Ser Ser Gly Ala Ser Gly Pro Gln Val Ser Ser
85 90